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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/616,194	07/14/2000	Danke Mahesh Bhaskar	TI-28043	3909
7590	07/01/2004			
Robert L Troike Texas Instruments Incorporated P O Box 655474 MS 3999 Dallas, TX 75265				
EXAMINER BRINICH, STEPHEN M				
ART UNIT		PAPER NUMBER		
2624		10		
DATE MAILED: 07/01/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/616,194

**Applicant(s)**

BHASKAR, DANKE MAHESH

**Examiner**

Stephen M Brinich

**Art Unit**

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harkin et al in view of White et al.

Re claim 1, Harkin et al discloses (column 7, lines 30-36) a method of enhancing pixel rendering using opcodes and a lookup table.

Harkin et al does not disclose the expansion of the lookup table beyond its original range. White et al discloses (column 51, lines 51-52) the expansion of a lookup table beyond its original range (from 0-255 to 0-65535). The expansion of the Harkin lookup table in this manner to accommodate values above the lookup table range (or in a corresponding manner to accommodate values below the lookup table range) would be an expedient obvious to one of ordinary skill in the art.

2. Claims 2 & 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harkin et al in view of White et al as applied to claim 1 above, and further in view of Applicant's admitted Prior Art.

Harkin et al in view of White et al does not disclose the use of the highest value of a lookup table for values above its normal range, or the lowest value of a lookup table for values below its normal range. Applicant's admitted Prior Art discloses

(page 7, line 16 - page 8, line 2) the use of the highest value of a lookup table for values above its normal range, or the lowest value of a lookup table for values below its normal range. The use of this method to provide values above and beyond the normal lookup table range in order to enable values to be provided in the extended lookup table of Harkin et al in view of White et al would be an expedient obvious to one of ordinary skill in the art.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harkin et al in view of White et al as applied to claim 1 above, and further in view of Steiner.

Harkin et al in view of White et al does not specify the use of opcodes for image shading control. Steiner discloses (column 26, lines 18-27) an image shading arrangement using a set of opcodes. The use of the extended lookup table of Harkin et al in view of White et al to store and manage the shading opcodes of Steiner so that the required opcode is provided when needed would be an expedient obvious to one of ordinary skill in the art.

4. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harkin et al in view of White et al as applied to claim 1 above, and further in view of Lung et al.

Harkin et al in view of White et al does not describe the use of a printing device and print controller for interpreting source language into machine language. Lung et al. (Figure 2A) discloses a printer having a printing device (Engine Unit) and a controller (Printer Controller) for interpreting source language into machine language (column 4, lines 13-18). A graphics figure to be printed is divided into rendering primitives with pixel values associated with pixel position (the array of "bit map data") and means for "rendering all types of drawing commands". The use of the printer and printer controller of Lung et al. to render the result of pixel opcode processing as described by Harkin et al in view of White et al into hard copy for storage and viewing would be an expedient obvious to one of ordinary skill in the art.

***Response to Arguments***

5. Applicant's arguments, see Paper #9, page 4, line 10 - page 7, line 13, filed 08 April 2004, with respect to the rejection(s) of claim(s) 1-6 under 35 USC §103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Harkin et al, White et al, Steiner, Lung et al, and Applicant's admitted Prior Art.

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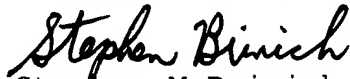
**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Brinich at 703-305-4390. The examiner can normally be reached on weekdays 7:00-4:30, alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center 2600 Customer Service center at 703-306-0377.

If attempts to contact the examiner and the Customer Service Center are unsuccessful, supervisor David Moore can be contacted at 703-308-7452.

Faxes pertaining to this application should be directed to the Tech Center 2600 official fax number, which is 703-872-9306.

  
Stephen M Brinich  
Examiner  
Art Unit 2624

smb  
June 22, 2004